

COMPETITIONS FOR SHIPYARD POSTERS

One Thousand Dollars in Prizes
Offered for Best Posters to
Speed up the Shipbuilding
Program.

THE CONTEST CLOSES JULY 25

A competition designed to obtain the best posters "to speed up shipbuilding" will be conducted through The New York Sun by the National Service Section of the United States Shipping Board Emergency Fleet Corporation, the National Committee of Patriotic Societies cooperating. Prizes aggregating \$1,000 are offered by the Shipping Board. The competition will close in July and the patriotic appeal is expected to bring out the best in thought and execution of which America is capable. Announcement of the principal features of the ship poster competition was made several days ago on behalf of Dr. Charles A. Eaton, head of the National Service Section, by A. R. Parkhurst, Jr., secretary, at the section's headquarters, Hotel Manhattan.

The big thought to be developed by those who submit designs for posters is that the man in the shipyards is the "man of the hour." He is just as important in the nation's scheme of things as the man in the trenches. His is the second line of defence. There must be no weak spot in it. Unless he stands behind the man in the trenches eight hours a day for six days a week our million of men in France are not going to be able to resist the pressure of the Hun. Without ships and more ships, food, munitions and supplies cannot be transported to the other side and the boys will be at the mercy of the Kaiser's hard driven hordes.

In the busy shipyards there are 350,000 men, all working after their individual fashion. Some are there simply for the money they "can get out of the job." The vast majority, however, are combining with an opportunity for work the real joy of knowing that they are putting in their best efforts to beat down Germany so that never again will she attempt to enslave the world. When men feel this way about it they are apt in the long run to do better and more work, something that Uncle Sam demands of all of us just now. Patriotic men who labor with the conviction that every time they drive a rivet they are also driving a nail in the Kaiser's coffin are not the kind of men who are prone to shirk or do sloppy work.

The posters will spur to better effort the man who has to do with the making of ships. They will encourage him to give to his country the very best that is in him. The psychology of it all will be that he will be enthusiastic over the idea that he is a cog in Uncle Sam's machine, as well as a worker for his daily living.

There are in the United States 154 shipbuilding plants and approximately 7,000 plants of a variety of kinds whose output has to do with shipbuilding. The prize posters in the competition and other posters which may be selected because of their peculiar merit, or the punch behind the idea, will be posted in these busy places for the inspiration of those who are at work day and night fast acquiring the art of beating the German Emperor at his own war game. It is desirable that entries shall be made in proportion to 42 inches wide by 36 inches high, although the shape and size are optional with the competitor. The work does not necessarily have to fill the entire area.

The board of judges consists of Ernest Elmo Calkins, Calkins & Holden, advertising; Heyworth Campbell, art director of "Vogue and Vanity Fair"; J. H. Chapin, art director of "Scribner's Magazine"; Arhtur W. Dow, professor of fine arts of Teachers' College, Columbia University; Ray Greenleaf, art director of Ward & Gow, advertising; Edward Harding, National Committee of Patriotic Societies; Hal Marchbanks, printed; A. R. Parkhurst, Jr., secretary of the National Service Section

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OFFICERS NOW NEEDED IN THE HEAVY ARTILLERY.

Letter From Captain J. L. B. Buck Emphasizes This Need.

Supplementing a report sent out about a month ago on the need for officers in the heavy artillery, Captain J. L. B. Buck C. A. R. C. made plans to address the Technology student body relative to enlistments upon graduation. He was prevented, however, from making the trip to Technology, and instead sent a copy of his speech. The following information is taken from that copy:

In the first part of the war the heavy guns were brought into position without any particular attempt at camouflage, the range was computed, rather roughly, when compared with the present methods, by observation, by one aerial observer, and the angle to which the gun must be elevated was poorly determined with only an allowance for wind and drift. The effectiveness of the fire was observed usually by a man posted in a balloon. This method proved too inaccurate and there was a great waste of ammunition so that new methods were devised which took every humanly conceivable difficulty into consideration. In the first place, instead of there being merely one observer who reported his information directly to the officer in charge of the field battery, two airplanes are sent out, which report by wireless to a range finding station behind the lines. This latter station has a map of all the ground in the enemy's territory, which is divided into small squares. The aviators, serving as a check on each other, report their position and the position of the objective, and the field station computes the

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WORK IN SHIPYARDS

Records Being Made Each Week
in The Various Yards.

Under the pressure of the times shipbuilding is making enormous strides. Every week new records are being made in the various yards.

Hog Island is jubilant over another record, the performance consisting of placing on a hull 162 1-2 tons of steel in eight hours, eclipsing the former yard record by 60 1-2 tons. The performance is considered the more remarkable because it was made under unfavorable conditions. A tower crane had not been erected where the men were working and they had to use a locomotive crane in handling all the material. The heating and offsetting of the shell plates had to be done at various places, further complicating the task.

Portland presents another example of efficiency:

A crew of 14 framers, 2 foreman and 4 riggers built and placed in position from lumber in the yards, 89 frames in 40 1-2 hours. These frames, being double, were built bolted together with 64 screw bolts in each frame, and two coats of carbolineum were applied before bolting together.

Two gangs of five men each planked complete a 310-foot hull, including garboard, 53 strakes of planking, in 27 days.

A planking gang at the United States Shipping Board Yard, Jacksonville, Fla., in one day recently put in a total of 72 planks, according to the "Hun Hammer", which thinks the performance sets a record. There are 108 strakes of 16 planks each all around the ship, making a total of 1,728 planks in all. At the rate of 72 planks a day it would take a crew only 24 working days to complete the planking of a vessel.

As regards total construction, the "Tuckahoe" appears to be a vessel of records. After having been launched in 27 working days, thereby setting a world's record, it was loaded with coal at the pier of the Baltimore and Ohio Railroad in 2 hours and 55 minutes—another record. The load of coal was 4,992 tons or the equivalent of 108 ordinary cars.

The "Tuckahoe's" reputation as a record breaker was further borne out

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SUMMER CREW SEASON STARTS THIS WEEK

Practice Will be Held Daily on
the Charles River at Five
O'Clock, Excepting on Satur-
days and Sundays.

TO PICK CREW FROM ALL CLASSES

The summer crew season started yesterday at 5.00 o'clock, practise being held at that time on every day, excepting Saturday and Sunday. The crew this year will be picked from all classes and it is expected that an excellent boat will result. Rowing is the only summer sport at Technology, offering as it does a splendid chance for good exercise. It is especially hoped that the Junior freshmen will support this activity, as it affords an opportunity to get in trim for Field Day in the fall. All men coming out will be taken care of.

Arrangements have been completed for several important races this summer. The crew will probably enter the New England Rowing Association Regatta to be held on the Fourth of July. On July 13 a race is scheduled with the West Lynn Boat Club, at which cups will be presented to each member of the winning crew. Races are also pending with the Farragut and Union Boat Clubs of Boston.

Professor Hosmer is having one mile and one-half mile courses surveyed on the Cambridge side of the river. These courses will start at the Boston Athletic Association Boat House and will end between the Institute Buildings and the Walker Memorial.

The following men with previous experience in rowing in class crews at the Institute are attending Summer School: From the Class of 1919: Untersee, McIntosh, Doten, Michaels, Hackett, B. H. Sherman, Webster, J. J. Falkenberg, Murdough, Webber, and Sholey. From the Class of 1920: Burroughs (Captain of last year's 1920 crew) and Groner. From Class of 1921: Merrill, Wheatland, R. Lee and Felsenthal.

DINSMORE ELY BURIED

WITH MILITARY HONORS
The American pilot, Dinsmore Ely, of Technology, who was fatally injured in an aeroplane accident at Villacoublay, on April 18, was buried with military honors at the Gonnart cemetery, Versailles, on Wednesday last.

The ceremony was very impressive. The body was covered with the American flag and wreaths of flowers sent by officers of the United States Air Service and by the family and friends. Representatives of the Prefect of the Department of Seine-et-Oise, of the Military Governor of Versailles, and of the Aero Club of America accompanied the body.

The pall-bearers were American officers and comrades of the dead pilot from the Lafayette Flying Corps.

A company of French artillerymen from Versailles and a company of American soldiers from the Q. M. C. headed the march through Versailles to the cemetery where the last honors were paid, the French being much impressed by the solemnity and pathos of the American "taps."

During the whole of the ceremony the guns of the neighboring forts boomed

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MILITARY SCIENCE BULLETIN.

At the expense of considerable time and trouble, Major Edwin T. Cole has filled out the military certificates for the men who were members of the Technology Summer Training Unit at East Machias, Me., during the summer of 1917. These certificates state the amount of training the men received in the different branches of the service, and may be obtained by calling at the office of the Military Science Department. These certificates will prove very useful in helping their owners to obtain commissions, and it is hoped that the men will call for the certificates as soon as possible.

CAMPAIGN ORGANIZED TO FIGHT MOSQUITOES

Professor Whipple Appointed To Sanitary Commission.

The campaign against mosquitoes started last Monday and on Tuesday there was a public hearing before the Cambridge City Council at which various people spoke, among them Prof. Harris of Harvard. At this meeting a sanitary commission as appointed. Those appointed were: Professor Whipple, Technology; Professor Ford, Harvard; Mr. Hastings, City Engineer; Dr. Bradford, Medical Inspector of the City Health Department; Mr. Hicks, Boston Chamber of Commerce, and Mr. Norris, President of the Cambridge Board of Trade. As a result of this hearing \$5000 were appropriated to be spent by the city engineer in co-operation with the sanitary commission.

The arguments for this appropriation were that there were so many sailors in the Harvard Radio School that there was need of some such safeguard. Already there are a few cases of malaria among the students who come from the South, and the anopheles mosquito, an insect which is capable of carrying the disease, has been caught here. The commission intends to drain all standing water, to oil all standing water which cannot be drained, and to try to get the people to cooperate in doing away with standing water. To this end several Course 8 men have already been employed and are now working under the guidance of Professor Whipple.

Professor Whipple is also consulting engineer for the United Public Health Service. He has been ordered to Newport News and Fortress Monroe, Va., to study the control of the mosquito there and will leave shortly.

DEPOT DETACHMENT

Limited Number of Enlistments
Open in 437th Engineers.

The following letter has been received from the Officer in Charge, General Engineering Depot, U. S. Army, regarding enlistment in the 437th Engineer Depot Detachment. Stamped envelopes and application blanks may be obtained by calling at the TECH office.

We are inviting a limited number of enlistments in the 437th Engineer Depot Detachment for duty in the Drafting Room of the General Engineer Depot at Washington, D. C., for the period of the war, to fill vacancies made by men being selected for the Officers' Training Camp.

Only those men will be considered who are not within the draft age, but are over eighteen and under forty-five years. This includes men who have reached their twenty-first birthday since June, 1917. Preference will be given to men of the class of 1918, who have had some practical experience at mechanical, electrical or structural drafting work. Summer vacation work will be considered sufficient.

The work done by the Drafting Force of the General Engineer Depot covers a wide range and affords the young engineer opportunity of gaining experience that would be hard to get elsewhere. There is every opportunity for promotion in the Detachment as aptitude and proficiency in work is shown. Men may rise to the grade of Master Engineer Senior Grade, with the prospect at any time of being selected for the Officers' Training Camp which are held every three months. Enclosed is a table showing the pay and allowance of the various grades in the Engineer Corps, also copy of Treasury Department Form 1A, showing the family and other allowances paid by the United States.

Those whose applications are accepted will receive from the Officer in Charge of the General Engineer Depot a letter authorizing their enlistment by any United States Army Recruiting Officer for the 437th Engineer Depot Detachment. It will be noted that men who are called to register in the draft June 5th must enlist before that date. The recruiting officer will furnish transportation to Washington.

It is hardly necessary to appeal to

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ENGINEERS NEEDED TO WORK IN NAVY YARDS

Civil Service Commission An-
nounces an Open Competitive
Examination for Engineering
Aid.

ON EDUCATION AND EXPERIENCE

A letter recently received from A. B. Court, Naval Constructor, U. S. N., calls to the attention of Technology graduates the pressing need for engineers for government work. Technical graduates of experience in important engineering construction work are desired to fill vacancies in the various Navy Yards. Owing to the hearty response of Technology graduates to government war work, the subject has been put before them in hopes that they may consider it. In some cases a man might be appointed to an officer status if he preferred it to serving in a civilian capacity. A copy of the qualifications necessary for these positions is published for the benefit of those interested.

The United States Civil Service Commission announces an open competitive examination for engineering aid for men only. Vacancies in the Navy Department, Washington, D. C., or at any navy yard or other naval establishment of the United States, at rates of pay ranging from \$7.36 to \$10.24 per diem, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer or promotion.

In filling vacancies in navy yards or other naval establishments certifications will be made of the highest eligibles residing in the vicinity of the place at which the appointee is to be employed, except that upon the request of the Department certification will be made of the highest eligibles on the register for the entire country who have expressed willingness to accept appointment where the vacancy occurs.

The duties of this position require experience in important engineering construction work, either in connection with various structures or in connection with installations of machinery of various kinds, particularly such work of this nature as may relate to the building and care of ships and to the management of plant facilities and appliances used. Additional credit will be given for marine experience of the kind specified.

Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated, on a scale of 100: (1) Education and preliminary training, 40; (2) Experience, 60.

Applicants must have had the education, training, and experience specified as follows:

Completion of the whole regular prescribed course in Naval Architecture, Civil Engineering or Mechanical Engineering, in an engineering school or college of recognized standing in the United States of America, Great Britain or France is required. In addition to this, at least three years' experience in engineering lines is required, at least one year of which must have been in a supervisory capacity.

In rating the subject of experience the degree of difficulty and importance of the work performed, the length of experience, and the rating which an applicant has had will be considered.

Statements as to education, training, and experience are accepted subject to verification.

Applicants must have reached their thirty-first but not their fifty-fifth birthday on the date of the examination.

Applicants will be admitted to this examination regardless of their residence and domicile; but those desiring permanent appointment to the apportioned service in Washington, D. C., must have been actually domiciled in the State or Territory in which they reside for at

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The Editor-in-Chief is always responsible for the opinions expressed in the editorial columns, and the Managing Editor for the matter which appears in the news columns.

IN CHARGE THIS ISSUE

R. H. Smithwick '21.....Assistant Night Editor

WEDNESDAY, JUNE 12, 1918.

HOME RULE IN THE DORMITORIES

IN the election, by means of which the dormitory men are choosing their various house committees for the summer term, a very noticeable improvement over the preceding election has been made. Last fall all the balloting was done in one evening at meetings held in the rooms of one prominent dormitory men in the several sections. The rooms in every case were packed to the doors, but even then not more than fifty per cent of the entire dormitory personnel was represented. In addition to this the men were not acquainted; very few of them knew all the men nominated, and for this reason it could hardly be said that the fall elections represented a fair and intelligent choice.

The spring elections, on the other hand, are being extended a week, giving the men a chance to get together and talk it over. Every man will be represented, because every man will be given a ballot, and no man can claim to be unacquainted with the men nominated, for there will be no nominations. Every man is immediately eligible to election to the committee in his section without nomination.

This change in the method of election cannot help but put in authority men who are the popular choice of the dormitories, but we should not let the improvement of the student government in the dormitories stop with a mere change in the method of elections. Our dormitory government is far from ideal. There are many changes which must be made; for example, while there is a set of house rules stating in general terms just what the occupants can do and can not do, there is no statement anywhere of just how far the authority of the committee extends. They fill vacancies in their own number and conduct house affairs in general in any way they see fit. If we are to have a democracy instead of an oligarchy in the dormitories, by all means let us have a two way constitution of some sort.

JUNIOR FRESHMEN AND THE DRILL

FROM a student military point of view, Technology is not so active as it was last summer. There is, however, a great innovation in one respect. There is some real freshman drill. It happens to the Junior Freshmen at 8 a. m. on Tuesdays, Thursdays and Saturdays, along the Esplanade. Be it said, to their credit, that they are doing their share. Under Colonel Hamilton and some miscellaneous cadet officers, they are getting close-order drill that fulfills its mission as a disciplinary measure. They are learning the principles of military courtesy from the start and are required to salute even the cadet officers, which, though perhaps a nuisance, is a splendid addition. The uniforms are coming in for a real inspection and blue ties and spiral puttees are rapidly disappearing. Promptness is being required and there are punitive measures that insure obedience absolutely.

It is no wonder that, with such an instructor and the beginnings of such discipline the Junior Freshmen seem to take more real, snappy, intelligent interest in the drill than freshmen classes have for years. Despite the early hour, they show a pep and enthusiasm that will make them, in a month or two, the best drilled organization here, for which place they will have a good deal of competition.

We are pleased with all this beyond measure, for we feel that it may in some way indicate the course which the Military Department is needed and we hope sincerely that the worries attendant to the establishment of a new R. O. T. C. Unit will not lead to the same undisciplined and half-hearted freshman regiment that we had last year.

It is with pleasure that we announce the election of Homer V. Howes, '20, as Managing Editor of the TECH; R. H. Smithwick, '21, C. A. Clarke, '21, and Henry Kieth, '21, Night Editors; K. B. White, '20, to the Editorial Board; and W. Curry, '21, to the News Staff.

PERSONAL.

Professor W. T. Sedgwick, who has predicted the future great field for women in work of bacteriology and public health, has now the pleasure of seeing another of his women graduates from the Harvard Technology School of Public Health enter into active service along these lines, Miss Clara V. McWhirk, S.B. of 42 Mount Vernon Street, Boston. Miss McWhirk, who was born in Milton, received her degree last year from Boston University. She took the summer courses of 1917 at the Institute and entered the School of Public Health for the regular year of 1917-18 as a special student. Her work here has included municipal sanitation, personal hygiene, public health laboratory, social sanitary problems, biology of infectious diseases, vital statistics and food analysis. Her experience in portion of her work has been gained at the Backus Hospital, Hartford.

Miss McWhirk has enrolled in the service of the Red Cross and expects speedily to be sent across. She leaves Boston this week to report at headquarters in New York.

Elmer H. Heath, Jr., a graduate from the department of Biology and Public Health of class of 1917 has been assigned to the Pathological Laboratory of the base hospital at Camp Devens. Upon his graduation from the Institute he was appointed assistant in the department from which he was graduated. About the first of last November, he left this position and enlisted in the Sanitary Corps, Medical Department, U. S. R.

C. E. Thornton, Ruiz, C. S. Knight, all of the class of '21, arrived in Bridgeport Saturday, and on Sunday Dumas, '20 and W. T. Adams, Bloomquist, McClelland, Clarkson, DelAquila, A. Acosta of the class of '21 arrived. Ruiz, DelAquila, Acosta and Dumas were unable to obtain employment in the shipyard on account of the fact that the Government requires that only Americans are eligible to work in the shipyards.

W. T. Adams, Blomquist, Thornton, McClelland, Clarkson have entered the employ of the Lake Torpedo Company as improvers.

Harry Batchelder, '21, is the latest arrival in Bridgeport.

E. F. Hewins, '16, of Hampton, Virginia, former editor-in-chief of THE TECH, is to be married today to Miss Eleanor Chamberlain of Springfield, Massachusetts.

Gerald T. Larre, '13 who has been assistant superintendent of the Rising Paper Mill at Housatonic, Massachusetts, for the last five years, has left that position to become superintendent of the Eastman Kodak Co.'s large new paper mill at Rochester, N. Y.

MERCHANT MARINE SAILORS SHOW BRAVERY ON THE SEAS.

Greater recognition by the Government and the public of the bravery and devotion of merchant marine sailors in meeting submarine dangers was urged by a conference of representative officers' associations and the United States Shipping Board Recruiting Service at the Boston Custom House on Tuesday, June 4.

The conference deprecated recent published attacks on the character of merchant marine sailors. It was agreed to make representations to Washington of the injustice of these attacks, and to urge official action to end them.

Among those who spoke strongly on the matter were Henry Howard, director of the Shipping Board Recruiting Service, who presided; Capt. Ulster Davis, national trustee of the American Association of Masters, Mates and Pilots; Capt. Arthur N. McGraw, secretary-treasurer of the Neptune Association; Bert L. Todd, secretary of the Ocean Association of Marine Engineers; Percy J. Pryor, representing the International Seamen's Union, and George H. Grubb of the Marine Engineers' Beneficial Association.

Director Howard told the conference that the Shipping Board Recruiting Service is now receiving "a magnificent set of men" as recruits for its merchant marine training squadron.

The appointment was announced of Capt. Charles Saunders as chief of the Shipping Board's free navigation schools on the California coast, with headquarters at San Francisco.

DINSMORE ELY BURIED

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at regular intervals. It was the first American military funeral at Versailles and the people seemed much impressed.

A touching feature was the presence of a little old French woman in mourning, who quietly joined the procession and stood with tearful eyes at the side of the grave. She explained to an officer that she had lost an only son, and that this was the first time she had an opportunity of mourning for an American who had died for France.

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POSTER COMPETITIONS

(Continued from page 3)

United States Shipping Board Emergency Fleet Corporation; Matlack Price, art critic and author of "Posters" and Henry L. Sparks, poster collector.

Conditions governing the competition are as follows:

All citizens of the United States are eligible.

The medium in which entries are executed is entirely optional with the competitor. Pen and ink, chalk, oil, water color, &c., may be used.

Text matter or wording on any entry is left to the competitor.

The United States Shipping Board flag should appear in reasonable size and in colors indicated, red, white and blue, where colors are used, otherwise in black and white.

Competitors may submit as many designs as desired for any class. No competitor can win more than one prize.

The competition will close in July, the exact date to be decided later. No entries received after that date will be considered.

All entries must be delivered, charges prepaid, and should be sent carefully packed, but without frames or glass.

All entries are sent at the owner's risk. The committee assumes no responsibility, but will exercise all reasonable care in handling the entries.

All entries are to be addressed United States Shipping Board Competition, care of The New York Sun, 150 Nassau street, New York City.

Entry blanks may be obtained by applying by letter to The Sun. Entry blanks properly filled out must be attached on the back of each entry, in the upper left hand corner. Additional blanks will be furnished on request.

All entries which are awarded prizes thereby become the property of the United States Shipping Board.

All entries not awarded prizes will be returned, charges collect, if so stated on the entry blank, but it is understood to be the privilege of the United States Shipping Board to select desirable entries for exhibition purposes and that those chosen may be retained as long as it is advantageous.

Special emphasis is laid on the fact that the house flag of the United States Shipping Board must appear on each design that is submitted. A copy of this flag will be sent to each person who files an application for entry blank.

In the competition the person who designs a poster has a comparatively wide field for subjects. The riveter, the holder on and the heater, the busy trio constituting the riveting crew, are just now very much in the public eye because of contests to determine how many rivets can be driven in a given time, but the holders of these very important jobs are only a small part of the great force that goes to make up the shipbuilding armies. There are caulkers, annealing men, steel workers and scores of others down to the commonest laborer, around any of whom an artist with imagination can make a design that will make known to the world the story of the patriotism of labor, when labor is applied to an industry that is speeding up the building of American ships to prevent the Germanizing of the world.

Red Cross posters have pointed out in telling fashion the great work of mercy the splendid men and women of that organization are doing night and day on the battlefields and in the hospitals of devastated France and Belgium.

Food administration posters which advise us to save the wheat and eat less fats in order that our soldiers may have plenty of food for the fighters now adorning the walls of thousands of American homes the walls of thousands of American homes saving is not always self-denial, but a short cut way to become better men and women physically.

The Liberty Loan and the War Stamp Savings posters have fulfilled their mission as daily reminders that by combining thrift with patriotism and lending to Uncle Sam we are helping our country while doubly helping ourselves.

In the shipbuilding poster competition an artist's fancy transferred to canvas or paper with a skill that talks may result in turning some expert mechanic now engaged in work not altogether essential to the success of the war to join the working force of some shipbuilding plant. At this plant he will have the satisfaction of knowing that he is actually giving the product of his brain and hands to his country. He at once becomes a better patriot and Uncle Sam gets another skilled artisan to speed up shipbuilding.

A United States soldier or sailor who gets an indefinable patriotic thrill out of his daily tasks and appreciates to the depths of his being what American citizenship means will have a chance, providing he is artistically inclined, to put over thoughts in poster form that may go far in downing the Hun.

The men in the shipyards, factories and shops dealing with shipbuilding are perhaps in the best position of all com-

petitors to put forth suggestions that will make for increased activity all along the line wherever men are engaged in the construction of steel, wooden or concrete ships. Such posters coming from the workers themselves undoubtedly will attract the widest attention and are bound to be an inspiration to the workers and to the heads of these gigantic enterprises to do more and better work in the great American task of filling the seas with ships to carry men, munitions and food.

The ways in which these shipbuilding posters can fulfil their mission are varied. But no artist could pay a finer or more deserved tribute to the men engaged in shipbuilding than to bring home to the American people the thought that he is the man on whom the country's defences largely depend, as without ships the war cannot and will not be won.

Speed and efficiency are the things that count.

Watch the speeding up.

NAVY YARDS NEED ENGINEERS

(Continued from page 1)

tion and must have the county officer's certificate in the application form executed.

Applicants must submit with their applications their photographs, taken within two years. Tintypes or proofs will not be accepted.

At the discretion of the Bureau, applicants may be required to report either in Washington, D. C., or elsewhere, for an oral examination to determine the personal characteristics, address, and general fitness for the performance of the duties of the position. This oral examination will be given to applicants in the order of their standing, and only to those who are called, or whom the needs of the service require. An applicant who fails to pass the oral examination will not be eligible for appointment. Applicants will be notified of the date and place of the oral examination.

Applications will not be accepted from employees of the Government or of firms or corporations engaged in carrying out contracts for the Government or its associates, unless accompanied by the written assent of the head of the office, firm, or corporation under which the applicant is employed to his appointment in case he should pass the examination.

This examination is open to all male citizens of the United States who meet the requirements.

OFFICERS FOR ARTILLERY

(Continued from page 1)

range very carefully, taking into consideration the distance of the objective, the wind, the drift of the shell, the weight of it, the number of times the particular gun has been fired, the resistance of the air that day, and the difference in elevation of the gun and the objective, which latter is determined from topographical maps. The range is then communicated by telephone to the officer in charge of the field battery. The positions of these guns are carefully screened from the enemy aerial observers by the modern methods of camouflage.

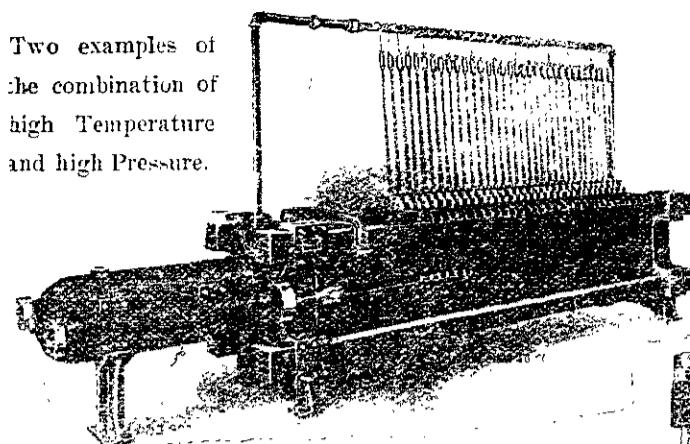
All of these calculations and operations must be made by skilled engineers and topographers, such as are turned out by the Institute, and in order to fit the men more fully for active service in the artillery, they are sent to Fort Munroe.

The Fort Monroe training camp is one of the oldest military institutions in the country. It was first established in 1824, but was discontinued in 1831. It was reestablished in 1857, only to be again discontinued during the civil war, but was finally given a permanent organization in 1867. In order for a civilian to attend this camp, he must first make application to the headquarters in Virginia; then after receiving the necessary papers, he must present himself to his local board, if he is registered, and there receive transportation as an enlisted man to the camp. If this is not the case the applicant must enlist at one of the Coast Artillery recruiting stations, is sent to one of the coast defences, and will be sent to Fort Munroe in that next quota to that camp, or he may proceed at his own expense to the camp and enlist there.

The course of instruction contains all that officers in the Coast Artillery should know, such as Gunnery, Topography, Material, and Administration. The daily program starts with reveille at 6.25 o'clock followed by a 15 minute setting-up drill. From 8.00 to 8.25 o'clock there is infantry drill, followed by class instruction from 8.30 to 11.45 o'clock. The afternoon period lasts from 1.05 to 4.25 o'clock. Twice a week there are calisthenics from 4.45 to 5.15 o'clock and the other three days there is evening parade in which the students act as officers. Study period is from 7.15 to 9.15 o'clock. On Saturday morning there is an inspection of ranks and barracks, while the rest of the morning is taken up by either a practice march or infantry drill.

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Many pressing operations such as embossing, veneering, forming, gluing and finishing require heat for proper results. Presses of this class are usually designed to order. The Press shown above is built

The initial treatment of fats and oils like tallow and palm oil produces a mixture in molten form of palmitic acid, stearic acid and oleic acid. Palmitic and stearic acids are used for candle stock while the oleic acid is used for soap stock.

In the process of separating these acids the mixture is cold pressed in a hydraulic Oleo press which produces red oil or turkey oil. The solid portion remaining is suspended in cloths in a stearic acid press as shown above. The plates are heated to about 104° to 120° F. by steam or hot water and the pressure is six tons to the square inch. We build an extensive line of Stearic Acid and Oleo Presses.

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Ethyl Acetate	Refined Fusel Oil
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DEPOT DETACHMENT

(Continued from page 1)

the patriotism of our young men at this time, for all realize that we are in this war to win and the efforts of every one must be directed to this end. It should also be borne in mind that the man behind the lines has as necessary a part in the prosecution of the war as the man in the front line trench.

W. H. ROSE,
Colonel, N. A.

WORK IN SHIPYARDS

(Continued from page 1.)

when she was turned over to the Shipping Board ready for sea service 10 days after launching. The vessel was surrendered to the captain and crew of 40 men at Philadelphia, May 15. Altogether 37 days were required from the laying of the keel to make her ready for her initial voyage.

At Arlington the riveters deserve praise. A record of 7,353 seven-eighths inch countersunk watertight rivets driven in the flat bottom of a ship in a 48-hour week is reported. Mr. Downey, president of the Downey Shipbuilding Corporation, Arlington, N. Y., ventures that this feat excels any other week's performance for one riveting gang on

similar heavy bottom shell rivets.

In riveting and bolting speed contests Ashtabula, Ohio, wants to go on record as having entered the game up to the ears.

On piece work, bolters comprising 60 per cent of the total bolting force in the yard, on all classes of work in the period from January 1 to April 1 put in an average of 246 bolts per gang per hour 10-hour day.

POPULARIZING DEHYDRATION OF FRUIT AND VEGETABLES.

New York City has established a food kitchen for the purpose of instructing individuals in food economy and to popularize dehydration—a method of food conservation long used in other countries. Free demonstrations, lectures, and lessons, to which the public is invited, are given daily. Results obtained in this city food kitchen show that the cost of dehydration is only one-quarter of a cent a pound for fruits and vegetables.

The process of dehydration shrinks the fruits and vegetables to about one-seventh to one-fifteenth of their original bulk, which solves transportation and storage problems. Moreover, this dehydrated food is practically non-perishable and is not affected by heat or extreme cold. It requires no con-

tainers other than paper bags, sealed to keep out dust, bacteria, and insects.

The process of reconstituting by soaking in water takes from 20 minutes to 2 hours. It is claimed that nothing is lost in the flavor, or even in color. A practical example that those in charge of this kitchen cite is that of dehydrated strawberries, soaked in grade B milk. The strawberries absorbed all the water from the milk, leaving a thick, rich cream with the reconstituted strawberries, which, spread on cake, made a strawberry shortcake. By this method one may have shortcake with good berries in January for the price one has paid for the fruit in June.

Through the cooperation of the New York commissioner of foods and markets, it has been made possible to secure for dehydration the unsold fruits and vegetables left on the piers, which otherwise would be wasted. It is estimated that the kitchen will save 1,000,000 pounds of fruit and vegetables a month in this way. Imperfect fruits and vegetables are also dehydrated to be used as feed for animals.

POTASH FROM KELP.

Recovering potash from kelp is expected to be of great importance to the food-producing industries in establish-

ing a domestic source of supply to relieve the United States from dependence upon Germany. According to reports from the Government plant in California, work is progressing quite encouragingly for the recovery of this important element of the soil from giant kelp.

There are three processes in this recovery: leaching, evaporating, and crystallizing. The evaporator and crystallizer machines have just been installed. It is not worn down enough yet so that the entire process of potash recovery can be carried out on a commercial scale. In the meantime the office of fertilizer investigations, Department of Agriculture, has been selling quite a little kelp char. Several carload lots have been delivered at good prices in the East.

CANADA COMPELS HOARDERS TO DISGORGE.

The Canadian Food Board has made a quiet investigation of many cases of flour hoarding, and has issued a warning that all above the amount needed for 15 days' supply must be returned to the source from which it was received. A typical case of this sort was given wide notice in Ontario last week. This householder had purchased 200

bags of flour at \$6.50 per bag, and upon discovery of this large supply was compelled to return the flour to the dealer at the present market price, which was considerably under what he paid, and pocket the loss himself. As one Canadian paper said, "Needless to say, no sympathy is felt anywhere for this food hog. If anything, his punishment is too light."

This same paper commenting editorially upon this case, said, "Canada is determined that no one within her borders will be allowed to place himself in a position of advantage with respect to flour supplies. Canadians must take their chances with the rest of the allied peoples in this matter. If there is to be a shortage it will be shared here equally with those who are not so fortunately placed."

SAVE OR SINK—SUCCOR OR PERISH

In the course of nearly four years of the world war, the gaunt hand of starvation has scrawled the names of more individuals on its side of the death ledger than have perished by gunpowder, gas, and steel. Four million, seven hundred and fifty thousand persons have died from starvation while about 4,250,000 have been killed by fighting. Hunger gnawed at the vitals of Russia until her morale was so weakened that she collapsed. The same cause may justly be attributed to the crumbling of heroic little Rumania. Italy, underfed with food and overfed with insidious German propaganda, went through a crisis last that threatened to result disastrous for the allied program. And now it has come from England, France, Italy, and Belgium that wheat must be forthcoming or they can not assure that the allied armies or the millions of the sacrificing, suffering millions behind the lines in those countries will be maintained.

On June 1, there remained but 50,000,000 bushels of wheat in the United States. If we consumed wheat at our normal rate of consumption, more than 40,000,000 bushels per month, we would lack at least 25,000,000 bushels for our needs during June and July, and must send one bushel abroad. To meet the very minimum needs of the allies, we must ship 30,000,000 bushels for this two-month period, leaving but 13,000,000 bushels per month—less than one third of normal consumption. The entire 30,000,000 bushels that the allies need must come from our savings before the next wheat harvest.

It is inconceivable that America should fail in this crisis. The various strata of our population can not bear equally this reduction in consumption of wheat bread. Those engaged in physical labor need a larger bread ration than those in sedentary occupations. Furthermore, the special requirements of children and invalids must be safeguarded. To meet the needs abroad and prevent serious suffering at home it is imperative that those whose circumstances permit shall abstain from wheat and wheat products until the next harvest.

With full understanding that as a Nation we must save or sink, succor those overseas or perish with them, let us grasp this opportunity—a privilege, not a sacrifice—to abstain from wheat. Thus, may those who can not fight materially aid the cause, on the success of which rests the freedom of mankind.

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